native. Only direct medical costs were considered. Costs and outcomes were discounted at 5% yearly. The outcomes considered were life years (LY) and quality adjusted life years (QALY). **RESULTS:** The incremental cost-effectiveness analysis demonstrated that AA is the most economically attractive medication. When the incremental cost-effectiveness ratio (ICER) for LY and QALY gained was evaluated, AA was dominant with regards to C, being more effective (LY: 1.3559 vs 1.2895; QALY: 0.7977 vs 0.7329) with lower costs (R$79,974 vs R$90,025). **CONCLUSIONS:** AA is the best therapeutic option, with the best cost-effectiveness ratio, versus C for the treatment of patients diagnosed with advanced mCRPC under Brazilian private perspective.

PCN87

COST EFFECTIVENESS EVALUATION OF VEMURAFENIB, AN ORPHAN DRUG FOR BRAF MUTANT METASTATIC MELANOMA

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OBJECTIVES: To identify the cost effectiveness ratio of Vemurafenib in the treatment of patients of the public health care institutions in Mexico, with BRAF positive mutation (BRFAF +) metastatic or advanced melanoma, compared with dacarbazina and temozolomide. **METHODS:** A Markov model was developed with monthly cycles, with 4 health states: clinical benefit, stable disease, disease progression and death, considering the adverse events as transitory stages, during a 5 year time horizon. A cost effectiveness analysis was developed, where the transition probabilities between the different health's states considered, are the basis to estimate how many life years (LY) the patients will achieve with the different treatment alternatives. The costing method used in this study is the direct medical costs, expressed in US dollars. **RESULTS:** In the pharmacoeconomic analysis, Vemurafenib was the most effective treatment producing a mean of 2.15 LY per patient during the 5 year time horizon, 1.17 additional LY to those produced by dacarbazine (.98 LY) or temozolomide (0.98 LY). This shows that Vemurafenib is the most effective alternative for this patient due the effectiveness is 2.2 times higher compared to dacarbazine and temozolomide. **CONCLUSIONS:** Given the current worldwide discussion regarding the cost-effectiveness (CE) of orphan drugs, is considered necessary to evaluate these drugs under a different criteria that those used for drugs that are not orphans. So patients, who have rare and deadly diseases, can have the opportunity to live longer and better.

PCN88

COST-EFFECTIVENESS ANALYSIS PER LIFE-YEAR GAINED BASED ON PREDICTORS OF RESPONSE FOR FIRST LINE METASTASIC COLORECTAL CANCER THERAPY IN SPAIN

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OBJECTIVES: To perform a cost-effectiveness analysis based on markers of response/resistance including biological therapies available in Spain for metastasic colorectal cancer (mCRC). **METHODS:** Incremental cost-effectiveness ratio (ICER) per life-year gained (LYG) and progression-free year gained were calculated based on predictive markers for mCRC. Efficacy data include randomized trials (RT) that guided on-label uses of bevacizumab and cetuximab. Control arms from these trials were used as reference scenario. Markers of clinical benefit (biological & radiological) were included. Toxicity as predictor of efficacy was excluded for any therapy. Prices for drugs in Spain were assumed to represent the best-value for each drug including all possibilities to reduce pharmacy costs. For 1st line, median duration of therapy reported by RT was used to calculate the final budget. 70kg and 1.7 m were used as reference for patients dose calculations. If accessible, HR for PFS and OS were used instead of medians. **RESULTS:** K-Ras status and early response measured by computed tomography at 8 weeks were used as predictors of resistance and increased efficacy for cetuximab-based combinations. We have not identified any predictor marker for other drugs from RT. In this regard, FOLFIRI+cetuximab combination obtained an ICER below the widely-proposed Spanish threshold of 30,000 € per LYG if patients harbored wild type (wt) K-Ras tumors and evidenced an objective response at 8 weeks. Other ICERs for different schedules were too distant from this limit. Multivariate analysis confirmed the robustness of results. **CONCLUSIONS:** First-line FOLFIRI+cetuximab therapy for wt K-Ras patients that get an objective response measured by CT at 8 weeks is the only cost- effective therapy option for mCRC below usual health economics thresholds for Spain. Our results are critical to design cost-effectiveness based clinical guidelines for mCRC that will contribute to financial sustainability of public health system in Spain.

PCN89

COST EFFECTIVENESS OF TREATMENT WITH NEW 6-MONTH LEUPRORELIN ACETATE FORMULATION IN PATIENTS WITH ADVANCED PROSTATE CANCER

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OBJECTIVES: To conduct a cost effectiveness analysis (CEA) comparing 3.75 mg 1-month (1M), 11.25 mg 3-month (3M) and 30 mg 6-month (6M) leuprorelin acetate formulations (LAF) in patients with advanced prostate cancer (APC) in Switzerland. **METHODS:** A CEA was performed from the payer perspective using a decision-tree model. Total treatment costs per patient per year and cost-effectiveness ratios (CER) were calculated. Clinical efficacy and safety data (serum testosterone <50ng/dl and adverse drug reactions /ADRs/) for LAF were obtained from randomized trials. Direct medical costs (drug, physician consultation and drug administration, and ADRs), reported as 2011 in Swiss Francs (CHF), were obtained from a Swiss health care database (Tarmed) and doctor interviews. We assumed a patient would visit the physician's office a minimum of 12, 4 and 2 times/year when treated with 1M, 3M and 6M LAF, respectively. The modeled annual costs were extrapolated to the median survival time (3.1 years) of a patient with APC. One and two-way sensitivity analysis was conducted to check robustness of the model. **RESULTS:** In Switzerland, the annual cost associated with 6M LAF (CHF 3,320) was lower than that associated with 3M (CHF 4,411) and 1M (CHF 5,672) LAF. The lifetime costs of treatment with 1M, 3M and 6M LAF were CHF 16,349, CHF 12,715 and CHF 9,664, respectively (Discount rate=3%). Annual cost savings associated with the 6M formulation were 41% and 24% over the 1M and 3M formulations, respectively. 1M and 3M LAF were dominated with higher overall costs and lower effectiveness compared to the 6M formulation (CER=CHF 5,154/effectiveness). Sensitivity analysis confirmed the robustness of the results. **CONCLUSIONS:** Results suggest 6M LAF as a cost-effective strategy for treating patients with APC. Dosing frequency, reduction of possible local side reactions and number of outpatient visits could be potential factors in optimizing drug-related treatment costs for APC.

PCN90

COST EFFECTIVENESS ANALYSIS OF BENDAMUSTINE AS FIRST LINE TREATMENT FOR CHRONIC LYMPHOCYTIC LEUKAEMIA IN THE NETHERLANDS

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OBJECTIVES: To compare, from a Dutch health care payer perspective, bendamustine against chlorambucil. The latter is the current first line treatment for CLL patients with Binet stage B or C for whom fludarabine combination therapy is not appropriate. **METHODS:** A Markov model to reflect the treatment sequence of patients with CLL in the Netherlands was developed in Treeage pro suite 2009 linked to Excel 2007. Three treatment lines were modelled before patients reached best supportive care. This treatment path was supported by a Dutch CLL expert panel. Transition probabilities were derived from clinical trials, the expert panel and Dutch mortality statistics. Health care resource utilisation was estimated for each health state using clinical guidelines and the expert panel. Model outcomes were life years (LY), quality-adjusted life years (QALYs), progression free life years (PFLY), and total CLL related health care costs (2011 values). The model time horizon was 10 years and monthly cycles were used. Annual discounting of 4%/1,5% was applied on costs and effects, respectively. **RESULTS:** The analysis showed that patients with bendamustine and chlorambucil as first line treatment generated 3.77 and 2.21 QALYs, respectively. The total average costs amounted to €79,328 for bendamustine, and €67,172 for chlorambucil. The incremental cost effectiveness ratio (ICER) of bendamustine compared to chlorambucil was €7,809 per QALY gained. The incremental cost per LY and PFLY gained were €7,374 and €6,908. The cost-effectiveness acceptability curve indicated that the probability that bendamustine was cost-effective approximated 95% at a threshold of €20,000 per QALY. **CONCLUSIONS:** Bendamustine compared to chlorambucil, in previously untreated Binet B or C CLL patients for whom fludarabine combination therapy is not appropriate, generated an ICER of €7,809 per QALY gained. This indicated that bendamustine is cost-effective as first line treatment for CLL in the Netherlands.

PCN91

THE COST-EFFECTIVENESS OF TRASTUZUMAB OVER THE PRODUCT LIFE CYCLE IN PORTUGAL: A DYNAMIC AND SOCIETAL PERSPECTIVE

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OBJECTIVES: Previous analyses have projected the health and economic impact of Herceptin® (trastuzumab) in HER2-positive (HER2+) breast cancer over the product life cycle in the US and major EU markets from a payer perspective. The objective of this analysis is to project the overall product life cycle cost-effectiveness of trastuzumab in HER2+ breast cancer treatment in Portugal, a relatively small (10.6 million inhabitants), lower income EU country, considering the societal perspective. **METHODS:** Using a product life cycle modeling approach, the projected life cycle ("dynamic") incremental cost-utility ratio (ICUR) was estimated for the period 2000 to 2020. The model combines projected "static" ICURs for trastuzumab in early (eBC) and metastatic (mBC) HER2+ BC based on the literature with epidemiological projections of annual HER2+ BC disease incidence and the utilization of trastuzumab in Portugal over this 21-year period. The major societal saving is reduced work loss for women with eBC who receive trastuzumab. The dynamic model considers both a payer and societal perspective over a lifetime horizon. All costs (in 2012 Euros) and outcomes are discounted at 3.0% to the year 2000. **RESULTS:** The model projects that over the 21-year period, 10,900 women would receive trastuzumab treatment for eBC, and 5,200 women for mBC. Given the respective ICURs from a payer perspective for eBC (11,000€ per quality adjusted life year (QALY)) and for mBC (43,000€ per QALY), the overall dynamic ICUR is approximately 15,000€ per QALY from payer perspective. Taking a societal perspective, this is projected to be reduced by at least 15%. **CONCLUSIONS:** Taking a dynamic—and societal—life cycle perspective, in the case of Portugal, over 16,000 QALYs are projected to be gained through the year 2020 at a very favorable ICUR of less than 13,000€ per QALY. Viewed over the product life cycle, trastuzumab for breast cancer would be considered cost-effective in Portugal.